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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION

WAYMO LLC,

Plaintiff,

v.

UBER TECHNOLOGIES, INC.;  
OTTOMOTTO LLC; OTTO TRUCKING  
LLC,

Defendants.

CASE NO. 3:17-cv-00939-WHA

**PLAINTIFF WAYMO LLC'S REPLY IN  
SUPPORT OF ITS MOTION FOR  
PRELIMINARY INJUNCTION**

**UNREDACTED VERSION OF  
DOCUMENT SOUGHT TO BE SEALED**

**Hearing:**

**Date: May 3, 2017**

**Time: 7:30 a.m.**

**Place: 8, 19th Floor**

**Judge: The Honorable William Alsup**

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## INTRODUCTION

Uber has taken, copied, and used Waymo's technology. This, along with Uber's subsequent cover-up and violations of this Court's orders, shows the need for an injunction in this case. The evidence shows that Uber met with Anthony Levandowski to recruit him away from Waymo at the same time Levandowski was telling co-workers he planned to "replicate" Waymo's technology at a new company. Uber enticed Levandowski to copy Waymo's technology for Uber's competing self-driving car program, ultimately purchasing Levandowski's months-old start up for \$680 million, even though it had no other viable technology to speak of. We now know those acquisition talks started *just two days after Levandowski left Waymo*, and probably even before that. By admission of Uber's own engineers in deposition, the evidence also now confirms that Uber used Waymo's intellectual property to develop LiDAR devices for self-driving cars, in spite of Uber's attempts to mislead this Court otherwise.

Attempting to hide its unlawful conduct, Uber has blocked and obfuscated in response to this Court's discovery orders. Uber – claiming a "common interest" with Levandowski and his start-up – has wrongly relied on the Fifth Amendment to block production of documents and testimony relating to its theft. And Uber has hidden over 3000 relevant documents from Waymo claiming "privilege" without disclosing even the basic information required by this Court for a privilege log. What little information is provided in these logs, however, shows that within two days of Levandowski's departure from Waymo, Uber was already "anticipating" litigation over its planned "acquisition" of Levandowski's new company.

In its Opposition, Uber misrepresents its LiDAR design efforts to this Court. Uber claims that, unlike Waymo's single-lens LiDAR design, Uber's LiDAR is a "four-lens design" called Fuji. Through discovery, we know this too is a cover up. As this Court observed on April 12 (Ex.<sup>1</sup> 89 at 90:4-18.), Uber's Opposition is silent on Uber's work before October 2016. Only days before filing this Reply, however, Waymo finally learned through cross examination of Uber's engineers that Uber *does* have a single-lens design, code named Spider. Levandowski, while in

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<sup>1</sup> "Ex." refers to exhibits attached to the Declaration of Jordan Jaffe, filed concurrently herewith.

1 possession of 14,000+ Waymo's proprietary documents, designed Spider himself. So it is no  
 2 surprise that it is a copy of Waymo's single-lens design, infringes Waymo's patents, and copies  
 3 Waymo's trade secrets.

4 In addition to omitting mention of Spider, Uber misled the Court to hide it. Waymo made  
 5 a motion to inspect pre-Fuji LiDAR designs, based on Uber's sworn certification made in a  
 6 Nevada regulatory submission that a pre-Fuji design existed. The Court asked why Waymo could  
 7 not inspect the device described in the submission. Counsel for Uber responded: "Because, Your  
 8 Honor, we showed it to them yesterday. It's the Fuji." (Ex. 89 (4/12/17 Hr'g) at 88:2-3.) As  
 9 Waymo now knows, it is not the Fuji. The regulatory filing describes Spider, Uber's single-lens  
 10 design. Counsel for Uber continued: "We're not hiding some device, Your Honor. We've got two  
 11 devices basically and we showed both of them to them yesterday." (*Id.* at 89:21-22.) Again, false.  
 12 They were hiding a device, Spider, which Uber only revealed to Waymo after one of its engineers  
 13 was forced to admit it existed in a deposition subsequent to that Court hearing.

14 Aside from its affirmative efforts to mislead the Court, Uber's opposition is silent on  
 15 fundamental aspects of the evidentiary record presented by Waymo. Uber does not dispute that  
 16 Levandowski, the head of its self-driving car program, downloaded 14,000+ confidential files  
 17 from Waymo's design server, transferred those files to a USB drive, and then wiped his laptop to  
 18 try to cover his tracks. Nor does Uber dispute that 2 GBs of that stolen data relate to Waymo's  
 19 LiDAR technology or that the stolen data includes the confidential specifications for each  
 20 generation of Waymo's LiDAR circuit boards.<sup>2</sup> Uber has not proffered a declaration from  
 21 Levandowski to rebut or explain these facts. Instead, Levandowski has asserted the Fifth  
 22 Amendment right against self incrimination. Elsewhere, however, he has essentially admitted  
 23 these facts. (Ex. 64 (Pennecot) 65:18-20 ("Q. So he didn't deny that he took the documents, right?  
 24 A. He didn't deny it."); Ex. 82 (Gruver) 60:16-19 ("Q. Did he deny that he had downloaded  
 25 \_\_\_\_\_

26 <sup>2</sup> Uber erroneously contends that Waymo "admits that four-fifths of this download were not  
 27 trade-secrets" (Opp. 10 (citing Janosko Decl. ¶¶ 23-24).) In fact, Janosko simply stated that 2 out  
 28 of 9.7 GBs of the confidential and proprietary internal Waymo information that Levandowski  
 downloaded *relate to LiDAR*. (Janosko Decl. ¶¶ 23-24.)

1 14,000 files while he was employed at Google? A. He did not.”.)

2 In addition to the Spider design, discovery has shown that Uber used Waymo trade secrets  
3 in its later Fuji design. Uber does not dispute that the drawing attached to the email entitled  
4 “OTTO FILES” that Waymo received from its LiDAR component vendor [REDACTED] on December  
5 13, 2016 (Dkt. 25-45) is, in fact, a circuit board used by Uber in connection with developing Fuji.  
6 And Uber does not dispute that, at its direction, Levandowski has been involved in the  
7 development of Uber’s LiDAR system from at least February 2016 (before Uber even acquired his  
8 company) to the present. Levandowski refutes none of this – he took the Fifth on these subjects  
9 too. (*E.g.*, Ex. 66 (Levandowski) 20:9-24, 100:9-101:15, 115:3-16.)

10 This is an exceptional case. It calls for exceptional relief. As described more fully below,  
11 Waymo is likely to succeed on its claims, and adverse inferences further support an injunction to  
12 avoid irreparable harm caused by Uber’s conduct. To this day, Levandowski remains heavily  
13 involved in Uber’s LiDAR development. Uber should be enjoined from continuing to use  
14 Levandowski in its driverless car program and from continuing to misappropriate and infringe  
15 Waymo’s intellectual property.

16 **I. WAYMO WILL PREVAIL ON ITS CLAIMS**

17 **A. Trade Secrets 1 and 4: [REDACTED]**

18 Uber does not dispute that its Fuji LiDAR device uses Trade Secrets 1 and 4. (Opp. 10-12;  
19 Kintz Reply Decl. ¶¶ 5-6.) The expert Uber tasked with analyzing those trade secrets did not  
20 dispute that Uber’s transmit boards use the trade secrets (McManamon Decl. ¶¶ 23, 50), and he  
21 admitted that he never compared [REDACTED] Uber’s transmit PCBs to  
22 Waymo’s trade secret design. (Ex. 83 (McManamon) 33:17-34:13.)

23 Instead, Uber argues that it independently developed Fuji, including its transmit boards.  
24 (Opp. 11-12.) But there is no credible evidence to support this theory. (Kintz Reply Decl. ¶¶ 16-  
25 23.) Uber has offered no explanation for how Fuji, which Uber “started developing” in “late  
26 October 2016” (Haslim Decl. ¶ 5), ended up with transmit boards nearly identical to those in  
27 Waymo’s [REDACTED] (Ex. 65 (Linaval) 52:18-23, 53:18-23) so quickly. Uber’s expert admits that  
28

1 developing the transmit portion of a LiDAR device is a multifaceted and involved process, but he  
 2 is notably silent about how long the design process might take or whether it is remotely realistic  
 3 for Uber to have developed the Fuji boards – without a jump start – in less than two months. (Ex.  
 4 83 (McManamon) 69:16-71:23.) Although Uber contends that Fuji is “based on the [REDACTED]  
 5 [REDACTED] that Scott Boehmke developed” (Opp. 11), Uber offers no analysis to link  
 6 Boehmke’s work to the Fuji device: Uber’s expert admitted he performed no such analysis. (Ex.  
 7 83 (McManamon) 46:22-47:4.) Uber also misleadingly omits that it was **Levandowski** who  
 8 provided direction to Boehmke for Uber’s [REDACTED] (E.g., Exs. 76-77.)  
 9 Levandowski’s involvement<sup>3</sup> firmly establishes that any development was not “independent.”

10 Uber argues that Waymo’s [REDACTED] cannot be a trade secret because it was  
 11 supposedly disclosed in two public sources: the PanDAR paper and Velodyne’s ’190 Patent.  
 12 (Opp. 11-12; McManamon Decl. ¶¶ 51-59.) But Uber’s expert has now admitted that the PanDAR  
 13 paper did not disclose [REDACTED] at all. (Ex. 83 (McManamon) 56:11-58:14.) With respect  
 14 to the ’190 Patent, Uber cites a single line that says “[t]he density of emitter/detector pairs  
 15 populated along the vertical FOV [field of view] is **intentionally variable**.” (Opp. 11 (Uber’s  
 16 emphasis).) Yet the remainder of the paragraph makes clear that the ’190 Patent does **not**  
 17 contemplate [REDACTED], much less [REDACTED]  
 18 [REDACTED]. Instead, the ’190 Patent simply  
 19 contemplates that different LiDAR systems could have different overall numbers of diodes. (’190  
 20 Patent 6:52-56.) Indeed, Uber’s expert admitted that the ’190 Patent does not teach any [REDACTED]  
 21 [REDACTED] (Ex. 83 (McManamon) 61:9-62:5.) He conceded that [REDACTED]  
 22 [REDACTED]  
 23 [REDACTED] (Id. 60:8-62:25.)

24 On this record alone, Waymo has established its likelihood of success. But the record is  
 25 buttressed even further by the adverse inferences that flow from Levandowski pleading the Fifth in

26 \_\_\_\_\_  
 27 <sup>3</sup> See generally Ex. 64 (Pennecot) 42:15-45:10, 71:10-72:5; Ex. 65 (Linaval) 35:13-14; Ex. 67  
 28 (Boehmke) 12:1-4, 16:18-17:3, 20:11-16; Ex. 68 (Haslim) 93:24-94:24; Ex. 82 (Gruver) 24:4-14,  
 24:25-25:5, 31:18-32:4, 39:6-9, 67:2-10; Exs. 69-78, 104, 111.



1 response to every question regarding Trade Secrets 1 and 4. (Ex. 66 (Levandowski) 136:7-142:2.)

2 **B. Trade Secret 7:** [REDACTED]

3 [REDACTED]  
 4 Uber does not dispute that it [REDACTED] in its custom LiDAR systems in  
 5 exactly the same way and by exactly the same amount – to the micron – that Waymo [REDACTED]  
 6 [REDACTED] in its current-generation LiDAR system. (Ex. 68 (Haslim) 62:8-20, 64:4-9; Ex. 64  
 7 (Pennecot) 21:12-17; Ex. 84 (Lebby) 58:14-23.) Uber does not contend that it independently  
 8 arrived at the design decision to [REDACTED] or that it independently derived [REDACTED]  
 9 [REDACTED]. (Ex. 84 (Lebby) at 75:4-76:16.) Uber does not dispute that Waymo  
 10 has maintained the confidentiality of its [REDACTED] design, that typical LiDAR systems  
 11 (including prior generation Waymo systems) utilize [REDACTED], or  
 12 that Waymo’s LiDAR system is the only one (besides Uber’s) that [REDACTED]  
 13 [REDACTED] or any other amount. (Kintz Reply Decl. ¶¶ 40-45.)

14 Instead, Uber contends only that a LiDAR system with [REDACTED]  
 15 [REDACTED] cannot be a trade secret because a textbook and a German doctoral thesis  
 16 purportedly reveal that [REDACTED] is a possible “design choice.” (Opp.  
 17 14.) But the cited page of the textbook actually states that [REDACTED] is a *problem* to be *avoided* –  
 18 explaining that [REDACTED] and results in  
 19 “ineffective heat conduction.” (Dkt. 182-4 at 224.) The cited thesis does not address LiDAR at all  
 20 (Dkt. 182-5 at 3) and, like the textbook, states that [REDACTED] is generally undesirable (*id.* at 28).  
 21 Nothing in the two references cited by Uber suggests that Waymo’s use of a [REDACTED]  
 22 in its current generation LiDAR system is a “general engineering principle in the public domain”  
 23 or otherwise calls into question Waymo’s showing that its [REDACTED] is a Waymo  
 24 secret that has economic value because of its secrecy. (Kintz Reply Decl. ¶¶ 42-45.) An adverse  
 25 interest of misappropriation is also appropriate given Levandowski’s pleading the Fifth in  
 26 response to every question on Trade Secret 7. (Ex. 66 (Levandowski) 146:1-147:2, 147:25-149:7.)

27 **C. Trade Secrets 2 and 3:** [REDACTED]

28 Uber does not dispute that its Fuji LiDAR device includes [REDACTED]

1 [REDACTED]. (Haslim Decl. Figs. 6A-F.) Like the [REDACTED] in Waymo's [REDACTED]  
 2 device – and like the design files for these PCBs that Levandowski stole – the [REDACTED]  
 3 [REDACTED]  
 4 [REDACTED]. (*Id.*; Kintz Reply Decl. ¶¶ 25-28.)

5 Despite using the [REDACTED] Uber  
 6 argues that it does not use Trade Secrets 2 and 3, based on the narrow distinction that Fuji includes  
 7 “[REDACTED]” rather than a “[REDACTED].” (Opp. 12.) But misappropriation does  
 8 not require an exact one-to-one match between the asserted trade secret and the accused device.  
 9 *SkinMedica, Inc. v. Histogen Inc.*, 869 F. Supp. 2d 1176, 1197 (S.D. Cal. 2012). The Fuji device  
 10 simply [REDACTED].  
 11 This minor modification does not allow Uber to escape liability for misappropriation. *See id.*  
 12 (“This scattershot attempt to disclaim use of various elements of the claimed trade secrets does not  
 13 foreclose the possibility that Histogen’s process was not substantially derived from the claimed  
 14 trade secrets, even if it differed in specifics from the process described therein.”). The same is true  
 15 with respect to Uber’s argument that [REDACTED] do not include [REDACTED]  
 16 [REDACTED] (Opp. 12-13.) Uber’s arrangement of [REDACTED]  
 17 [REDACTED] is nothing more than a minor modification to Waymo’s trade secret design, with the [REDACTED]  
 18 [REDACTED]

19 Uber’s purported independent development of Fuji’s [REDACTED] is based  
 20 entirely on Haslim’s statement that he came up with the Fuji [REDACTED] through an “iterative  
 21 approach.” (Opp. 13; Haslim Decl. ¶ 11.) But the only piece of evidence that Haslim cites to  
 22 show an “iterative approach” is an email he sent to Boehmke on October 28, 2016, where he  
 23 stated, “[REDACTED].”  
 24 (Haslim Decl. Ex. A at 1.) The email does not discuss any “iterative approach,” let alone explain  
 25 how Haslim went from “[REDACTED]” to the specific [REDACTED]  
 26 (remarkably similar to Waymo’s) in less than two months.

27 Moreover, the record evidence contradicts Uber’s argument that Trade Secrets 2 and 3 are  
 28

1 “a general approach” dictated by “well known principles of physics.” (Opp. 12.) Uber does not  
 2 cite a single LiDAR device – other than Waymo’s [REDACTED] and Uber’s Fuji – that includes an  
 3 arrangement of [REDACTED]. (Ex. 84 (Lebby) 37:15-21.) Uber’s  
 4 expert admits that there are many different possibilities for [REDACTED]  
 5 [REDACTED], and many different design considerations could be balanced differently to arrive  
 6 at different solutions. (*Id.* 38:13-39:21.) Indeed, although Uber argues that one would be led to  
 7 Waymo’s design simply by “the desire to reduce the size, cost, and complexity of the system”  
 8 (Opp. 12), Uber’s expert admits that designs other than Waymo’s (and now Uber’s) would result  
 9 in a smaller and less complex system. (Ex. 84 (Lebby) 47:9-48:14.) Similarly, although Uber’s  
 10 expert suggested that [REDACTED] might lead to  
 11 Waymo’s design (Lebby Decl. ¶ 35), that consideration is actually more likely to lead to [REDACTED]  
 12 [REDACTED]. In sum, Uber’s expert has only confirmed that [REDACTED]  
 13 results from the consideration of a variety of factors, which are often in tension and which can be  
 14 balanced in a variety of ways based on competing priorities – in other words, [REDACTED]  
 15 [REDACTED] design is far from a “well known principle of physics.” Here too, an adverse interest of  
 16 misappropriation is also appropriate in light of Levandowski’s pleading the Fifth to every question  
 17 on Trade Secrets 2 and 3. (Ex. 66 (Levandowski) 142:13-145:23.)

19 **D. Trade Secret 14:** [REDACTED]  
 20 [REDACTED]

21 Uber concedes that [REDACTED] in Fuji. (Haslim  
 22 Decl. ¶ 14; Ex. 65 (Linaval) 59:4-12.) Uber’s attorneys argue that Uber does not also [REDACTED]  
 23 [REDACTED], citing one paragraph in Haslim’s declaration  
 24 (¶ 14) to support that position. But Haslim does not disavow [REDACTED]  
 25 [REDACTED]; Haslim simply states that Uber uses fiducials to position laser diodes. (*Id.*) And  
 26 Exhibit B to Haslim’s declaration reveals that [REDACTED]  
 27 [REDACTED] Moreover, nowhere does Haslim (or anyone else) address Uber’s use of [REDACTED]  
 28 [REDACTED] which would only be necessary if [REDACTED]

1 [REDACTED]. (Mot. 15; Kintz Reply Decl. ¶ 48.)

2 Uber cites to its expert Dr. Lebby to contend that Trade Secret 14 was in the public  
 3 domain. (Opp. 15.) But Dr. Lebby mischaracterizes the trade secret as [REDACTED]  
 4 [REDACTED], and then argues  
 5 that each was known in non-LiDAR and non-optical engineering literature. (Lebby Decl. ¶¶ 52-  
 6 58.) Dr. Lebby has not pointed to a reference disclosing the use of [REDACTED]  
 7 [REDACTED] (Ex. 84 (Lebby) 70:5-8  
 8 ('109 patent discloses [REDACTED]); 71:3-72:12 (German patent application nowhere discloses  
 9 [REDACTED]; 74:5-15 ('037 patent discloses [REDACTED]).) An adverse interest of  
 10 misappropriation is also appropriate in light of Levandowski's pleading the Fifth in response to  
 11 every question on Trade Secret 14. (Ex. 66 (Levandowski) 149:14-154:23.)

#### 12 **E. Uber's Use of Additional Waymo Trade Secrets**

13 In addition to the trade secrets called out in Waymo's initial motion, expedited discovery  
 14 has confirmed that Uber is using at least five other Waymo trade secrets, as more fully described  
 15 in Kintz's declaration submitted herewith. (Kintz Reply Decl. ¶¶ 55-79.) For example, Waymo's  
 16 Trade Secret 48 is directed to Waymo's unique [REDACTED]  
 17 [REDACTED]. Waymo's inspection  
 18 of Spider, combined with an electrical schematic produced by Uber (Ex. 92), has revealed Uber's  
 19 use of [REDACTED]. (Kintz Reply Decl. ¶¶ 72-77.) Just like  
 20 Waymo, [REDACTED]  
 21 [REDACTED]. (*Id.* ¶¶ 74-75.) And Levandowski directed his  
 22 Otto employees to get "[REDACTED]," a supplier of [REDACTED]  
 23 [REDACTED] like those used by Waymo. (Ex. 86.) This evidence of misappropriation is  
 24 consistent with Levandowski's download of a specific presentation describing Trade Secret 48,  
 25 entitled "Google [REDACTED] for Car LiDAR," which Levandowski stole (in addition to the entire  
 26 contents of Waymo's SVN server) (Droz. ¶ 25 & Ex. H at 7) and with Levandowski's pleading the  
 27 Fifth in response to all questions regarding Trade Secret 48 (Ex. 66 (Levandowski) 103:13-105:4).

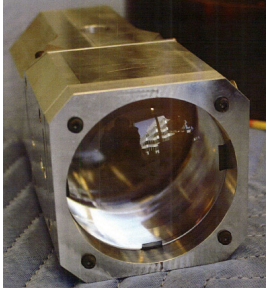
## F. Uber Infringes the '922 and '464 Patents

Uber does not challenge the validity of these patents. Uber's defense to patent infringement is limited to an argument that Fuji – and Fuji alone – does not practice the asserted patents because Fuji uses multiple lenses for transmitting and receiving laser pulses. Left out of Uber's Opposition and as explained below, the Spider device infringes at least claim 1 of the '922 patent and claim 1 of the '464 patent. The '922 and '464 patents are directed to a multi-beam single-lens LiDAR system. (Mot. 16-19.) All of the knowledgeable Uber engineers Waymo deposited admit that Spider is such a system. (Ex. 64 (Pennecot) 36:16-38:8; Ex. 67 (Boehmke) 44:16-45:14, 75:4-12; Ex. 68 (Haslim) 38:22-39:18, 45:22-46:1, 47:9-19, 48:1-8; Ex. 82 (Gruver) 67:15-68:15.) Each of the limitations of claim 1 of the '922 patent are satisfied, as outlined below and confirmed by Uber's engineers and Waymo's expert (Kintz Reply Decl. ¶¶ 83-84).<sup>4</sup>

a lens mounted to a housing, wherein the housing is configured to rotate about an axis and has an interior space that includes a transmit block, a receive block, a transmit path, and a receive path, wherein the transmit block has an exit aperture in a wall that comprises a reflective surface, wherein the receive block has an entrance aperture, wherein the transmit path extends from the exit aperture to the lens, and wherein the receive path extends from the lens to the entrance aperture via the reflective surface;	Spider includes a rotating housing. (Boehmke Ex. H <sup>5</sup> at 14 (“Rotate assembly at 20Hz”); Ex. 87.) That housing is designed for eight optical cavities (“interior space[s]”), each with a transmit block, receive block, transmit path, and receive path. (Ex. 64 (Pennecot) 36:16-25.) The transmit path would extend from each laser to the lens, and the receive path would come back through the same lens, and then bounce off a mirror (“reflective surface”) and into the receive block. ( <i>Id.</i> 37:1-13; Ex. 68 (Haslim) 47:9-19; Ex. 67 (Boehmke) 44:8-45:14; Ex. 82 (Gruver) 67:15-22.)
a plurality of light sources in the transmit block, wherein the plurality of light sources are configured to emit a plurality of light beams through the exit aperture in a plurality of different directions, the light beams comprising light having wavelengths in a wavelength range;	Each Spider optical cavity has eight lasers in each transmit block. (Ex. 68 (Haslim) 46:18-24.) These eight 1550 nm laser beams all go through the exit aperture in different directions. (Ex. 82 (Gruver) 68:5-15; Boehmke Ex. H at 13-14.)
a plurality of detectors in the receive block, wherein the plurality of detectors are configured to detect light having wavelengths in the wavelength range; and	Each Spider optical cavity has eight avalanche photodiodes as detectors in the receive block, detecting the 1550 nm laser beams. (Ex. 68 (Haslim) 45:25-46:1; Ex. 82, (Gruver) 68:5-

<sup>4</sup> For the same reasons, Spider infringes claim 1 of the '464 patent. The only difference between '464 claim 1 and '922 claim 1 is the former's requirement that “the transmit path at least partially overlaps the receive path in the interior space between the transmit block and the receive block” instead of requiring the transmit path to pass through a hole in a mirror and the receive path be reflected by said mirror. As Haslim testified, “[t]he laser going out generally would be considered coaxial to the receive light that comes back in,” and the transmit and receive paths thus share and overlap in an interior space in the same optical cavity. (Ex. 68 (Haslim) 48:1-15.)

<sup>5</sup> Boehmke testified (Ex. 67 at 58:21-22) that “Plan C” in Ex. H to his declaration was Spider.

<p>1 wherein the lens is configured to receive the light 2 beams via the transmit path, collimate the light 3 beams for transmission into an environment of 4 the LIDAR device, collect light comprising light 5 reflected by one or more objects in the 6 environment of the LIDAR device, and focus the 7 collected light onto the detectors via the receive 8 path.</p>	<p>15; Boehmke Ex. H at 13.)</p> <p>In each optical cavity, Spider has a single lens collimating the transmitted light into the environment and collecting and focusing the reflected light onto the detectors. (Ex. 67 (Boehmke) 44:8-45:14; Ex. 68 (Haslim) 47:9- 19; Ex. 82 (Gruver) 67:23-68:4.) The single lens mounted on a Spider optical cavity is depicted to the right. (Ex. 88.)</p> 
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8 Although Uber engineers have clearly admitted that Spider infringes Waymo's patents,  
9 Levandowski pleading the Fifth in response to every question on that subject further supports the  
10 conclusion. (Ex. 66 (Levandowski) 105:8-108:6.)

## 11 **II. ADVERSE INFERENCES ARE APPROPRIATE AGAINST UBER**

12 Uber has aggressively resisted discovery of the extent of its intellectual property theft at  
13 every turn. Waymo is entitled to an adverse inference that the Uber has and is continuing to use  
14 Waymo's trade secrets and patented designs for three reasons:

15 ***Fifth Amendment.*** Levandowski asserted his privilege against self-incrimination in  
16 response to every single question posed at his deposition (Ex. 66) other than six foundational  
17 questions eliciting, for example, his name and education (*id.* 8:8-13; 9:16-19; 10:11-17.)  
18 Levandowski took the Fifth on all questions on his relationship with Uber prior to his resignation  
19 from Waymo (*id.* 74:13-76:12, 155:19-156:13); Uber's knowledge of and involvement in his theft  
20 of Waymo documents (*id.* at 16:11-18); Uber's use of Waymo's trade secrets (*id.* 13:15-14:23,  
21 71:15-74:12); and Uber's efforts to conceal Levandowski's misappropriation. (*id.* 18:14-20:1).

22 On this record, it is appropriate to draw various adverse inferences that Levandowski's  
23 production of documents and testimony on a given issue<sup>6</sup> would have been unfavorable to Uber.  
24 *Baxter v. Palmigiano*, 425 U.S. 308, 318-19 (1976). Adverse inferences are particularly justified  
25 here, where the evidence being withheld is central to the underlying dispute and cannot reasonably

26 \_\_\_\_\_  
27 <sup>6</sup> Further while this Court ordered Levandowski to produce documents at his deposition (Ex. 89  
28 (4/12/17 Hr'g) 75:25-76:17), he did not produce any documents until April 19, when his counsel  
said he mailed documents (Ex. 102) that Waymo still has yet to receive.

1 be obtained from other sources. *Doe ex rel. Rudy-Glanzer v. Glanzer*, 232 F.3d 1258, 1265 (9th  
 2 Cir. 2000). And adverse inferences are properly asserted against **Uber** because Levandowski's  
 3 "self-interest would counsel him to exculpate his employer, if possible," especially with his stock  
 4 grants on the line (Exs. 108-109). *RAD Services v. Aetna Cas. & Sur.*, 808 F.2d 271, 275 (3d Cir.  
 5 1986); *see also Aptix Corp. v. Quickturn Design Sys.*, 98-762, 2000 WL 852813, at \*21 (N.D. Cal.  
 6 Jun. 14, 2000) (Alsup, J.), *vacated in part on other grounds by* 269 F.3d 1369 (Fed. Cir. 2001).  
 7 Indeed, Uber has repeatedly relied on a purported unity of interest with Levandowski to shield  
 8 relevant evidence from discovery under a purported common interest privilege and has otherwise  
 9 now ratified Levandowski's conduct. *Data Gen. Corp. v. Gruman Sys. Support Corp.*, 825 F.  
 10 Supp. 340, 353 (D. Mass. 1993) (holding adverse inference against former employee's new  
 11 employer appropriate where new employer "learned that [former employee] brought the tape from  
 12 [plaintiff], turned a blind-eye to [his] potential continued wrongful use of [confidential  
 13 information], and probably shared in the rewards of [his] apparent wrongdoing . . .").

14 ***Obfuscation, discovery misconduct, and spurious privilege claims.*** Uber has willfully  
 15 violated this Court's Orders requiring it to find and return Waymo's confidential information.  
 16 (Dkt. 135.) Although Uber contends that "none of Waymo's documents crossed over to Uber"  
 17 (Opp. 8), Uber has no basis for that statement. Uber has not submitted a declaration or other  
 18 evidence indicating that it has done ***anything at all*** to investigate whether Levandowski has  
 19 Waymo's confidential documents in his possession or whether Levandowski has referenced those  
 20 materials – on Uber devices, by "working from home" (Ex. 79), or otherwise – to guide the  
 21 development of LiDAR at Otto/Uber. In other words, Uber has specifically excluded  
 22 Levandowski, the head of Uber's self-driving car project, from its purported investigation into  
 23 whether that project has benefited from Waymo's confidential information; indeed, Waymo just  
 24 learned yesterday that Uber did not search Levandowski's Otto/Uber email for information  
 25 responsive to any of Waymo's document requests. (*E.g.*, Ex. 112 (RFP 6), 113.) To this day,  
 26 Uber does not prohibit Levandowski from bringing personal laptops and electronic devices into  
 27 Uber offices, Uber does not track network and server activity by Levandowski, and Levandowski  
 28



1 continues to remain in charge of Uber's self-driving car program and to provide detailed input into  
 2 LiDAR design. (Ex. 80 at -48; Ex. 81, Response to Haslim RFP 5.) Having wholly abdicated its  
 3 Court-ordered obligation to find and produce not only Waymo's files but also any materials  
 4 containing information derived from those files, Uber should not be heard to argue that "none of  
 5 Waymo's documents crossed over to Uber."

6 Beyond Uber's continued violation of the Court's expedited discovery orders, Uber has  
 7 withheld massive amounts of documents relevant to Waymo's claims under a claim of "joint  
 8 defense privilege." Defendants have produced more than 1000 pages of privilege logs  
 9 withholding more than 3000 relevant documents. (Exs. 61-63.) While Uber claims all of these  
 10 thousands of relevant documents relate to Uber's "due diligence" of Otto (even months after the  
 11 transaction closed), Uber has provided no evidence to support that claim, even instructing  
 12 witnesses not to answer questions regarding the purported common interest. (Ex. 66  
 13 (Levandowski) 28:21-30:25, 32:25-34:2, 36:20-37:6, 38:4-41:20, 41:21-43:7.)

14 ***Uber's Misrepresentations.*** Uber has also made misrepresentations to the Court about its  
 15 LiDAR program. Uber told this Court in its Opposition that "Uber does not use" a single-lens  
 16 design. (Opp. 8 n.17.) Wrong. And when Waymo filed a motion to inspect this single-lens  
 17 design, Uber's counsel stated, "We're not hiding some device, Your Honor. We've got two  
 18 devices basically and we showed both of them to them yesterday." (Ex. 89 (4/12/17 Hr'g) 89:21-  
 19 22.) Again, wrong. Uber ***does*** have a single-lens design, Spider, which Uber only revealed to  
 20 Waymo after one of its engineers finally testified about it in a deposition after that Court hearing.  
 21 (Ex. 65 (Linaval) 34:1-14.) Multiple Uber engineers have now testified that Uber's Spider LiDAR  
 22 uses a single lens for both transmitting and receiving laser beams. (Ex. 68 (Haslim) 38:20-39:16;  
 23 Ex. 67 (Boehmke) 75:4-12; Ex. 64 (Pennecot) 28:5-18; 32:4-33:23; Ex. 82 (Gruver) 26:7-9.)

24 What is all the more outrageous is that the Spider design came from Levandowski  
 25 personally – presumably copied out of Waymo's 14,000 files in Levandowski's possession. (Ex.  
 26 64 (Pennecot) 71:10-24 ["Q What was Mr. Levandowski's role in the Spider design? Referring to  
 27 Anthony Levandowski. A He made some sketches at the -- like, he basically brought me on the  
 28



1 project. Q When you said, ‘He made some sketches,’ what are you talking about? A So he came  
 2 to my desk and made some sketches . . . . Q. And did the sketches that he designed, is that the  
 3 basis for the optical cavity that we marked as the picture, as Exhibit, I think, 101? A. I designed  
 4 around these sketches, yes.”]; Ex. 88 (picture referred to in preceding testimony); Ex. 68 (Haslim)  
 5 93:24-94:24.) Even in the limited time Waymo has had to study Spider, Waymo has shown  
 6 (*supra* Part I.F) that it reflects several Waymo trade secrets and infringes Waymo’s ’922 and ’464  
 7 patents. (Ex. 82 (Gruver) 26:7-9, 67:12-68:22; Ex. 64 (Pennecot) 36:13-38:8.)

8 ***Adverse Inferences Are Appropriate.*** The following specific adverse inferences are  
 9 appropriate based on Uber’s misconduct: (i) copies of Waymo’s files are in Levandowski’s  
 10 possession, (ii) Levandowski has brought copies of Waymo’s files to Uber on his personal laptops  
 11 and electronic devices (which Uber has admittedly never searched), (iii) Levandowski has  
 12 accessed copies of Waymo’s files while “working from home” for Uber, and (iv) Uber has used  
 13 the items delineated in Waymo’s Trade Secret List in its LiDAR development.<sup>7</sup>

### 14 **III. THE OTHER FACTORS FAVOR INJUNCTIVE RELIEF**

#### 15 **A. Waymo Timely Filed Its Complaint and Injunction Request After Learning of** 16 **Defendants’ LiDAR Program in December 2016**

17 Uber argues that Waymo’s supposed delay in filing this suit belies the need for a  
 18 preliminary injunction. (Opp. 21-22.) But there was no such delay. Uber’s use of Waymo’s trade  
 19 secret information only started to become clear in December 2016, when Waymo saw an email  
 20 from one of its LiDAR component vendors, showing what appeared to be an Uber LiDAR circuit  
 21 board. That indicated that Uber had misappropriated Waymo’s trade secrets and infringed  
 22 Waymo’s patents. Later, on February 9, 2017, Waymo learned that Otto told Nevada state  
 23 regulators that it is no longer using a third-party LiDAR solution, but rather has “developed in  
 24 house and/or currently deployed” an “[i]n-house custom built 64-laser” LiDAR system. Waymo  
 25 then proceeded to file a detailed complaint 14 days later, and a preliminary injunction motion 15

26 <sup>7</sup> *Tourmaline Partners v. Monaco*, 3:13-CV-00108, 2016 WL 614361, at \*4 (D. Conn. Feb. 16,  
 27 2016) (“An adverse inference is an appropriate sanction to address a party’s failure to respond to  
 28 discovery requests.”); *see also Odnil Music v. Katharsis*, CIV S-05-0545, 2007 WL 3308857, at  
 \*6 (E.D. Cal. Nov. 6, 2007); *Goldman v. Alhadeff*, 131 F.R.D. 188, 192 (W.D. Wash. 1990).

1 days after that, which included a detailed list of its misappropriated trade secrets. Waymo filed its  
2 claims against Uber in a timely fashion.

3 In response, Uber notes that Waymo looked at Levandowski's Waymo-issued laptops and  
4 Google Drive activity logs in mid-2016 and was suspicious of certain downloads in October 2016,  
5 a time line that Waymo acknowledged up front in its papers (Dkt. 25-4, at 13). But Uber  
6 overlooks that Levandowski covered his tracks and fails to explain how Waymo's concerns and  
7 suspicions at this time were sufficient to bring a lawsuit alleging specific legal violations by *Uber*.  
8 Indeed, Waymo's efforts to investigate show that it acted assiduously and in good faith to  
9 determine whether there was any violation before bringing suit. And as this Court found in  
10 *Illumina*, it was perfectly timely for Waymo to seek a preliminary injunction after it had concrete  
11 evidence of Uber's malfeasance but before Uber could irrevocably distort competition in the self-  
12 driving car market. 207 F. Supp. 3d 1081, 1093-94 (N.D. Cal. 2016).

13 **B. Uber's Attempted "Head Start" into the Nascent Self-Driving Car Market**  
14 **Using Waymo's Own Technology Will Cause Irreparable Harm**

15 Courts routinely recognize that misappropriation of trade secrets creates irreparable harm  
16 to a competitor. *See V'Guara Inc. v. Dec*, 925 F. Supp. 2d 1120, 1126 (D. Nev. 2013). In fact,  
17 numerous recent cases have recognized that a presumption is warranted in trade secret cases.  
18 *Language Line Servs., Inc. v. Language Servs. Assocs., Inc.*, 944 F. Supp. 2d 775, 782 (N.D. Cal.  
19 2013) ; *UIC Gov't Servs., LLC v. Fleitz*, No. 3:15-CV-00212-SLG, 2015 WL 12516774, at \*3 (D.  
20 Ariz. Nov. 24, 2015). As for the few cases Uber cites finding no irreparable harm in the trade-  
21 secrets context (Opp. at 18 n.39), Uber does not discuss any of their facts — and for good reason,  
22 as all are wildly inapposite.<sup>8</sup> And money damages are inadequate where, as here, it would be  
23 difficult to quantify the loss of sales. *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 862 (Fed.

24 <sup>8</sup> In one, the irreparable harm reasoning was based on its holding that the trade secrets claim was  
25 likely to fail on the merits. *GSI v. United Memories*, C 13-1081 PSG, 2013 WL 12172990, at \*9,  
26 11 (N.D. Cal. Aug. 21, 2013). In another, the plaintiff essentially abandoned its trade secrets  
27 claim. *Precision Auto. v. Tech. Servs.*, 07-CV-707-AS, 2007 WL 4480739, at \*3 (D. Or. Dec. 14,  
28 2007). Another was merely "a debt collection action dressed up in federal trademark infringement  
clothes." *Kahala v. Kim*, No. CV 13-02933, 2013 WL 12086126, at \*3 (C.D. Cal. July 10, 2013).  
The last dealt with information about customers (not technology), and the plaintiffs provided no  
evidence of harm. *Southeast X-Ray v. Spears*, 929 F. Supp. 2d 867, 875-76 (W.D. Ark. 2013).

1 Cir. 2010). To determine how much of a nascent market Waymo might lose due to Uber's  
 2 violations would require many assumptions and likely to underestimate monetary damages.

3 Uber argues that Waymo would not be harmed prior to trial because [REDACTED]  
 4 [REDACTED]. (Opp. 19.) This [REDACTED] date assumes that  
 5 Uber continues using Waymo's intellectual property [REDACTED]. (Ex. 68 (Haslim) 82:10-  
 6 14.) That "head start" is exactly the irreparable harm Waymo seeks to prevent. *See Lamb-*  
 7 *Weston, Inc. v. McCain Foods, Ltd.*, 941 F.2d 970, 974 (9th Cir. 1991); *Netlist Inc. v. Diablo*  
 8 *Techs. Inc.*, No. 13-CV-05962, 2015 WL 153724, at \*8 (N.D. Cal. Jan. 12, 2015).<sup>9</sup> Uber's only  
 9 response to these cases (Opp. 20 & n.43) is that they concern established markets. But a nascent  
 10 market (as here) makes it even *more* important which competitor can hit the market first and  
 11 therefore *more* harmful for a competitor to get an improper head start. Moreover, knowledge  
 12 cannot be un-learned, and the knowledge gained from using Uber's confidential trade secrets  
 13 would provide Uber with a significant benefit regardless of whether Uber was later barred from  
 14 further misappropriation of trade secrets or further patent infringement.

#### 15 **IV. THE COURT SHOULD ISSUE A PRELIMINARY INJUNCTION**

16 For the foregoing reasons, Waymo respectfully requests the Court to order that Uber be  
 17 preliminarily enjoined from: (1) using Levandowski to work on Uber's self-driving car program;  
 18 (2) using the 14,000 files and other proprietary documents taken from Waymo; (3) using the trade  
 19 secrets discussed in Waymo's briefing (Trade Secrets 1-4, 7, 14); (4) infringing claim 1 of the  
 20 '922 patent and claim 1 of the '464 patent; and (5) based on adverse inference, using the additional  
 21 trade secrets identified in Waymo's list of trade secrets (Dkt. 25-7) pending trial.<sup>10</sup>

22  
 23  
 24  
 25 <sup>9</sup> The lone case that Uber cites (Opp. 20) on this point concerned a TRO, so its reliance on the idea  
 26 that the competing product would not be sold immediately made sense in that case (but not here  
 27 for the much longer period that would be covered by a preliminary injunction). *Zodiac Pool Sys.,*  
*Inc. v. Aquastar Pool*, 13-cv-343-GPC, 2013 WL 690616, at \*5 (S.D. Cal. Feb. 22, 2013).

28 <sup>10</sup> Waymo is not seeking a preliminary injunction for secrets in Section H of its Trade Secret List.

1 DATED: April 21, 2017

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